Friday's Feature
By
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Pine Bark Beetles

The recent hurricanes caused substantial damage to the area's pine trees. The damage ranged from broken branches to trees being snapped in half. Unfortunately, the surviving pine trees may be at further risk from pine bark beetles.

Many gardeners have heard of the dreaded southern pine bark beetle and associate their attacks to timber production stands. There are actually five different beetle species in Florida that are commonly called pine bark beetles and they are capable of attacking valued landscape pines.

The primary role of pine bark beetles in nature is to selectively remove dying or damaged pines. Beetle infestations often begin on severely stressed or injured trees. Odors emitted by trees struck by lightning, damaged by storms, mechanically injured or stressed by heavy pruning attract bark beetles from other places. Pines under any type of stress are susceptible to attack by bark beetles.

Most bark beetle infested pines are discovered when the homeowner notices that the needles have changed from the normal dark green color to a light green, yellow or red color. Many people also notice sawdust-like, boring dust at the base of the tree. On closer examination of the trunk, you will see holes where the beetles have chewed through the bark. Normally, the pine tree responds to this invasion by flooding the attack site with sap with results in popcorn-like blobs of resin called pitch tubes. This defensive reaction can sometimes "pitch-out" the attacking beetles. While pitch tubes on the bark are one of the best ways to identify a bark beetle attack, pitch tubes may not form on extremely stressed trees.

Pitch tube caused by a pine bark beetle

The most severe and ultimately fatal injury is caused by the larvae or the immature form of the beetle. Once bark beetles colonize and destroy the tree's inner layers, the tree is doomed. If you find evidence of bark beetles and all the pine needles turn brown at the same time, you are most likely going to lose the

tree. The tree should be removed immediately and the wood taken from the property. If left standing, the infested tree becomes a breeding area for more beetles that could attack nearby trees.

The best way to protect your pine trees is to keep them healthy. Pines in a landscape should be maintained at a low enough density so that the tops of the trees do not touch.

Also be sure to maintain adequate mulch under the tree. Putting a mulch bed under a tree prevents mechanical injury to the trunk by the lawnmower or string trimmer. Mulch should be two to four inches deep and extend out at least as far as the branch spread. Do not pile mulch up against the tree trunk.

What about insecticides? Insecticides do have a place in bark beetle management, but it is rather limited. Several insecticides traditionally used to control these pests, like Dursban and Lindane, have been removed from the market. A new product called Onyx™ became available in late 2003. Onyx™ works best when applied preventively, before adult beetles have attacked the tree. For homeowners, this product may be worth a try on valued ornamental pines in close proximity to trees that are actively infested with bark beetles. It is by no means a cure all solution and legally must be applied by a licensed pesticide applicator.

Tip of the Week: Topping a tree creates a dangerous tree. Topping is cutting the trunk and branches to random lengths. This improper pruning practice is not recommended and can increase the likelihood of rot and decay. Always prune a branch back to a living branch crotch.

Theresa Friday is the Residential Horticulture Extension Agent for Santa Rosa County. The use of trade names in this article is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product name(s) and does not signify that they are approved to the exclusion of others.